

gaattcatctgtcgactgtaccacgggaggttccccggagaaggatcctgcagccccgagt 60  
cccaggataaagcttggggttcattcctccttccttgatcactccacagtcctcaggct 120  
tccccaatccaggggactcggcgcgggacgctgtatggacgacattttcactcagtgct 180  
M D D I F T Q C 8  
CGGAGGGCAACGCAGTCGCCCTGTGGCTGGACAAACACGAGAACGACCTCAAC 240  
R E G N A V A V R L W L D N T E N D L N 28  
CAGGGGACGATCATGGCTTCTCCCCCTTGCACTGGGCCCTGCCGAGAGGGCCGCTCTGCT 300  
Q G D H G F S P L H W A C R E G R S A 48  
GTGGTTGAGATGTTGATCATGCGGGGCGCACGGATCAATGTAATGAACCGTGGGGATGAC 360  
V V E M L I M R G A R I N V M N R G D D 68  
ACCCCTGCATCTGGCAGCCAGTCATGGACACCCGTGATATTGTACAGAAAGCTATTGCAG 420  
T P L H L A A S H G H R D I V Q K L L Q 88  
TACAAGGCAGACATCAATGCAGTGAATGAACACGGAATGTGCCCTGCACTATGCCCTGT 480  
Y K A D I N A V N E H G N V P L H Y A C 108  
TTTTTGGGGCCAAGATCAAGTGGCAGAGGACCTGGTGGCAAAATGGGGCCCTTGTCAAGCATC 540  
F W G Q D Q V A E D L V A N G A L V S I 128  
TGTAACAAGTATGGAGAGATGCCCTGTGGACAAAGCCAAGGCACCCCTGAGAGAGCTTCTC 600

Fig. 1a (continued on page 2/23)

C	N	K	Y	G	E	M	P	V	D	K	A	K	A	P	L	R	E	L	L	148
CG	AG	CG	GG	C	AG	AG	AT	GG	CC	AG	AT	CT	CA	AC	CG	TAT	CC	AT	AC	660
R	E	R	A	E	K	M	G	Q	N	L	N	R	I	P	Y	K	D	T	F	168
.T	G	A	AG	GG	AC	CC	CG	AC	TC	GG	CC	CG	AA	TG	GA	AC	CT	CT	GG	720
W	K	G	T	T	R	T	R	P	R	N	G	T	L	N	K	H	S	G	I	188
G	ACT	T	CA	A	C	AG	CT	T	CC	T	G	AC	GA	AG	CT	CA	CT	CT	GG	780
D	F	K	Q	L	N	F	L	T	K	L	N	E	N	H	S	G	E	L	W	208
A	AG	GG	CC	GT	GC	AG	GC	AT	GC	AT	GC	AT	GC	AT	GC	AT	GC	AT	GC	840
K	G	R	W	Q	G	N	D	I	V	V	K	V	L	K	V	R	D	W	S	228
ACA	AG	GA	AG	AG	C	AG	CT	CA	AT	GA	AG	GT	GT	CC	CG	CT	CA	GG	AT	900
T	R	K	S	R	D	F	N	E	C	P	R	L	R	I	F	S	H	P		248
A	AT	GT	CT	CC	AG	TC	AG	TC	GC	CT	GC	CT	GC	CT	GC	CT	GC	CT	GC	960
N	V	L	P	V	L	G	A	C	Q	S	P	P	A	P	H	P	T	L	I	268
AC	AC	ACT	GG	AT	GC	CT	CC	CT	CT	CA	AT	GT	ACT	AT	GA	AG	GC	AA	TT	1020
T	H	W	M	P	Y	G	S	L	Y	N	V	L	H	E	G	T	N	F	V	288
GT	GA	CC	AG	AG	CC	GT	GT	GA	AG	TT	GT	CT	TT	GG	AC	AT	GG	CA	AG	1080
V	D	Q	S	Q	A	V	K	F	A	L	D	M	A	R	G	M	A	F	L	308
C	A	C	A	C	T	A	G	CC	CC	AC	GC	AT	GC	ACT	CA	AT	AG	CC	GT	1140
H	T	L	E	P	L	I	P	R	H	A	L	N	S	R	S	V	M	I	D	328

Fig. 1a (continued on page 3/23)

GAGGACATGACTGCCCGAATTAGCATGGCTGATGTC AAGTTCTTCCAATGTCCCTGGT 1200  
 E D M T A R I S M A D V K F S F Q C P G 348  
 CGCATGTATGCACCTGCCCTGGGTAGCCCCCGAAGCTCTGCAGAGAAGCCTGAAGACACA 1260  
 R M Y A P A W V A P E A L Q K K P E D T 368  
 AACAGACGCTCAGCAGACATGTGGAGTTTTCAGTGTCTCTGTGGAACTGGTGACACGG 1320  
 N R R S A D M W S F A V L L W E L V T R 388  
 GAGTACCCCTTTGCTGACCTCTCCAATATGGAGATTGGAATGAAGGTGGCATTTGGAAGGC 1380  
 E V P F A D L S N M E I G M K V A L E G 408  
 CTTGGCCTACCATCCACAGGTATTTCCCTCATGTGTGTAAGCTCATGAAGATCTGC 1440  
 L R P T I P P G I S P H V C K L M K I C 428  
 ATGAATGAAGACCCCTGCAAGCGACCCAAATTGACATGATTGTGCCCTATCCTTGAGAAG 1500  
 M N E D P A K R P K F D M I V P I L E K 448  
 ATGCAGGACAAGtaggactggaaggctccttgccctgaactccagaggtgtcgggacatggt 1560  
 M Q D K \*  
  
 tgggggaatgcacctccccaaagcagcaggcctctggttgccctccccgcctccagtcacat 1620  
 ggtactaccacagcctggggtccatccccctcccccatccctaccactgtgcgcaagagg 1680  
 ggcgggtcagagccttgtcacttgccacatgggtgtctccccacacatgggaggatcagcc 1740  
 ccgcctgtcacaataaagttattatgaaaaaaaaaaaaaaaaaaaaa 1789

		I		II	
Csk		.NMKELKLLQ	TIGKGEFGDV	MLGDYRGN.K	VAVKCIKND
Yes		IPRESLRLEV	KLGGQCFGEV	WMGTWNGTTK	VAIKTLKPGT
Ctr1		IPWCDLNIKE	KIGAGSFGTV	HRAEWHGS.D	VAVKILMEQD
B-raf		IPDGQITVGQ	RIGSGSFGTV	YKKGWHG...D	VAVKMLNVTA
Ilk		IDFKQLNFLT	KLNENHSGEL	WKGRWQGN.D	IVVKVLDKVR
		III		IV	
Csk		LAEASVMTQ	LRHSNLVQLL	GVIVEE.KGG	LYIVTEYMAK
Yes		..EAQIMKK	LRHDKLVPLY	AVVSEE...P	IYIVTEFMTK
Ctr1		LR EVAIMKR	LRHPNIVLFM	GAVTQPP...N	LSIVTEYLSR
B-raf		KNEVGVLRK	TRHVNILLFM	GYSTKP...Q	LAIVTQWCEG
Ilk		NEECPRLLRI	FSHPNVLPVL	GACQSPAPH	PTLITHWMPY
				V	
Csk					GSLVDYLRSR
Yes					GSLLDLFLKEG
Ctr1					GSLYRLLHKS
B-raf					SSLYHHLHII
Ilk					GSLYNVLHE.
				Via	
Csk		GRSV.LGGDC	LLKFSLDVCE	AMEYLEGN..	NFVHRDLAA
Yes		EGKF.LKLPQ	LVDMAAQIAD	GMAIYIERM..	NYIHRDLRA
Ctr1		GAREQLDERR	RLSMAYDVAK	GMNYLH.NRN	PPIVHRDLKS
B-raf		ETKFEMI...K	LIDARQTAQ	GMDYLHAK..	PNLLV.DK
Ilk		GTNFVVDQSQ	AVKFALDMAR	GMAFLH.TLE	PLIPRHALNS
				Vib	
Csk					RNVLS.E
Yes					ANILVG.D
Ctr1					NNIFLH.E
B-raf					RSVMI.DE
Ilk					

Fig. 1b (continued on page 5/23)

VII

Csk	DNVAKVSDFG	LTK.....EA	SSTQDTGKLP	VKWTAPEALR	...EKKFSTK
Yes	NLVCKIADFG	LARLIED.NE	YTAQGAQFP	IKWTAPEAAL	...YGRFTIK
Ctrl	KYTVKVCDFG	LSRLKAS.TF	LSSKSAAGTP	.EWMAPEVLR	...DEPSNEK
B-raf	DLTVKIGDFG	LATVKSRSWG	SHQFEQLSGS	ILWMAPEVIR	MQDKNPYSFQ
Ilk	DMTARIS...	MADVKSFC	PGRM.YA..P	.AWVAPEALQ	KKPEDTNRSS

372

IX

Csk	SDVWSFGILL	WEIYSFGRVP	YPRIPDK.V	VPRVEKGY..	KMDAPDGCPP
Yes	SDVWSFGILL	TELVTGGRVP	YPGMVNRE.V	LEQVERGY..	RMPCPQGCPE
Ctrl	SDVYSFGVIL	WELAT.LQQP	WGNL.NPAQV	VAAVGFCKK.	RLEIPRNLNP
B-raf	SDVYAFGIVL	YELMT.GQLP	YSNINNRRDQI	IFMVGRGYLS	PDLSKVRNSNC
Ilk	ADMWSFAVLL	WELVTR.EVP	FADLSNMEIG	MK.VALEGL.	R.TIPPGISP

418

XI

Csk	AVYEVMMKN	CWHLDAAMRP	SFLQREQLE	HIKTHEL
Yes	SLHELMKL	CWKKDPDERP	TFEYIQSFLE	.....
Ctrl	QVAAIIEG	CWTNEPWKRP	SFATIMDLLR	PL.....
B-raf	PKAMKRLMAECLKKRDERP	LFPQILASIE	LLARSLP	
Ilk	HVCKLMMKI	CMNEDPAKRP	KFDMIVPILE	KMQDK..

451

Fig. 1b

ANKYRIN	-G-TPLH-AA--GH---V---LL--GA---N----	
CONSENSUS	A	D
ANK1	<sup>33</sup> HGFSPLHWACREGRSVAVVEMLIMRGARINVMNR	
ANK2	GDDTPLHLAASHGHRDIVQKLLQYKADINAVNE	
ANK3	HGNVPLHYACFWGQDQVAEDLVANGALVSICNK	
ANK4	YGEMPVDKAKAPLRELLRERAEKMGQNLNRI PY <sup>164</sup>	

Fig. 1c

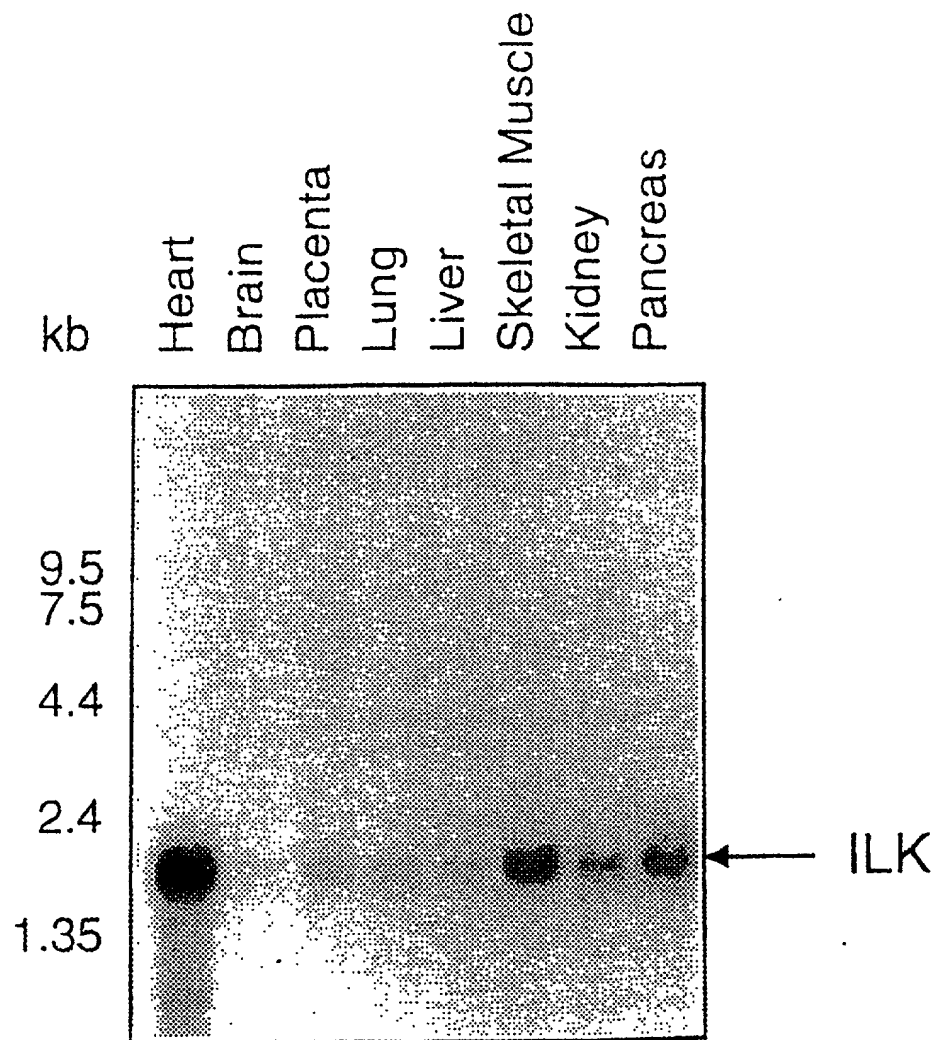


Fig. 1d

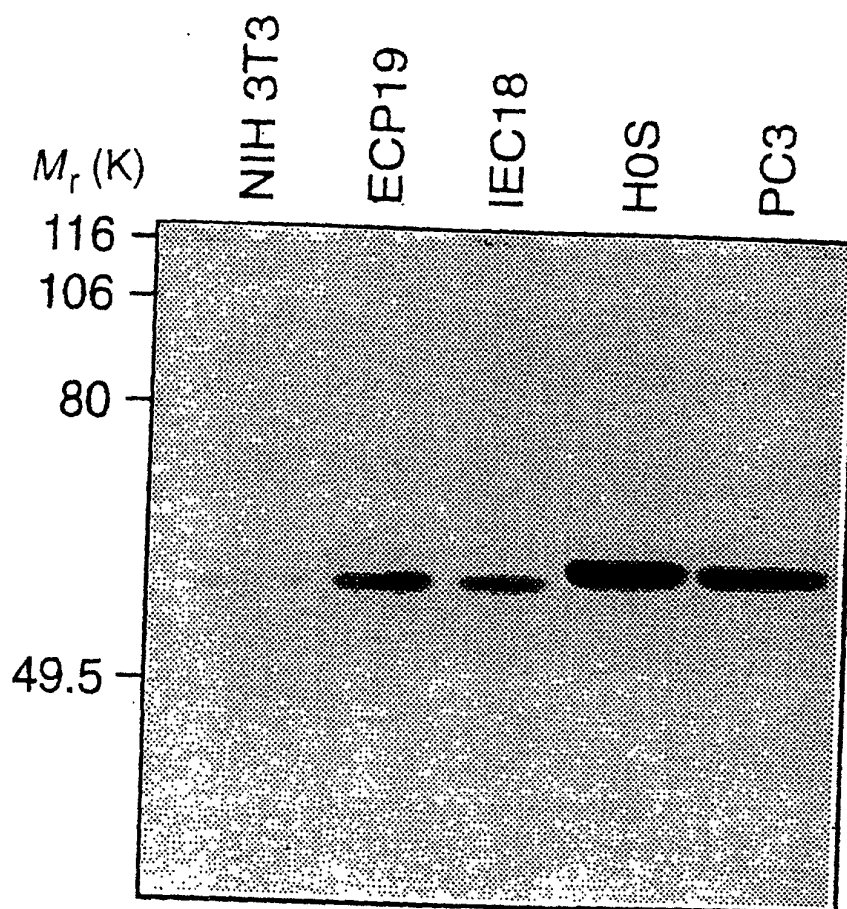


Fig. 1e

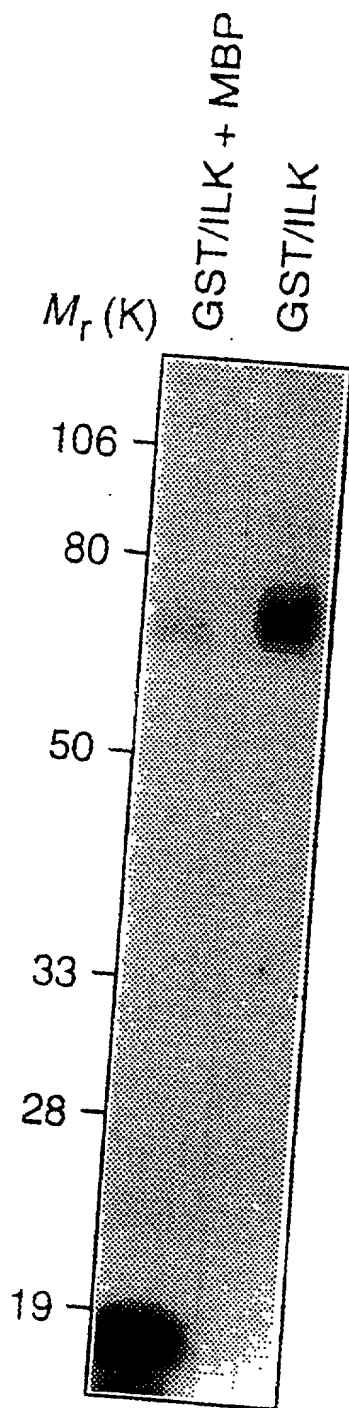


Fig. 2a

FOE240\* 10/20/85B

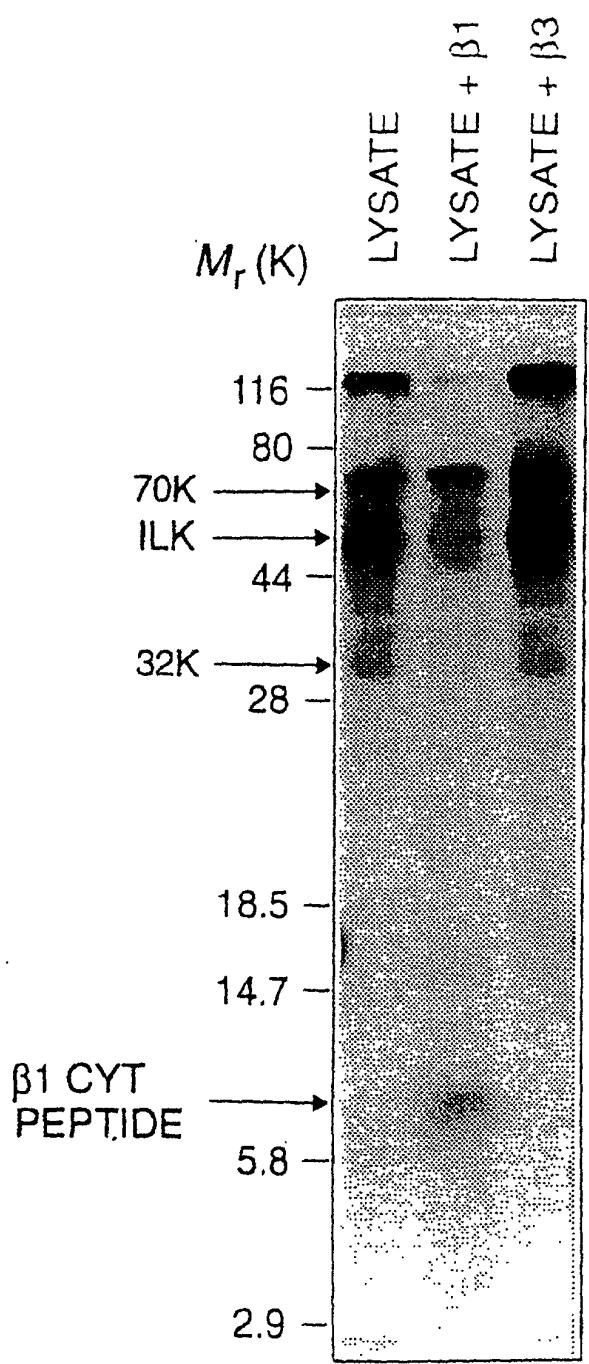
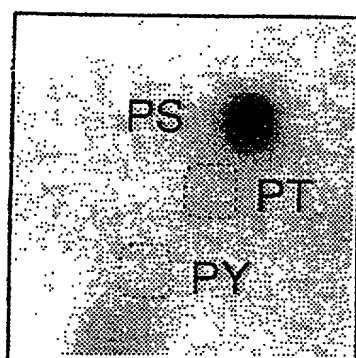
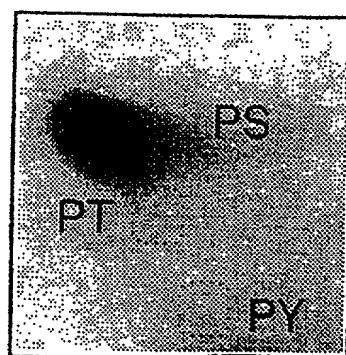


Fig. 2b

ILK



MBP



$\beta_1$  CYT

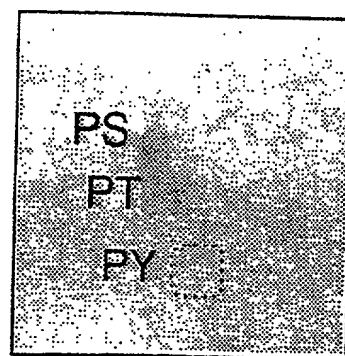


Fig. 2c

Western blot analysis showing the phosphorylation of ILK. The blot displays two lanes: 'Pre Immune' and 'Anti-ILK'. Molecular weight markers are indicated on the left at 106, 80, 50, and 32.5 kDa. An arrow points to a band in the 'Anti-ILK' lane at approximately 66 kDa, labeled  $p^{59}$  ILK.

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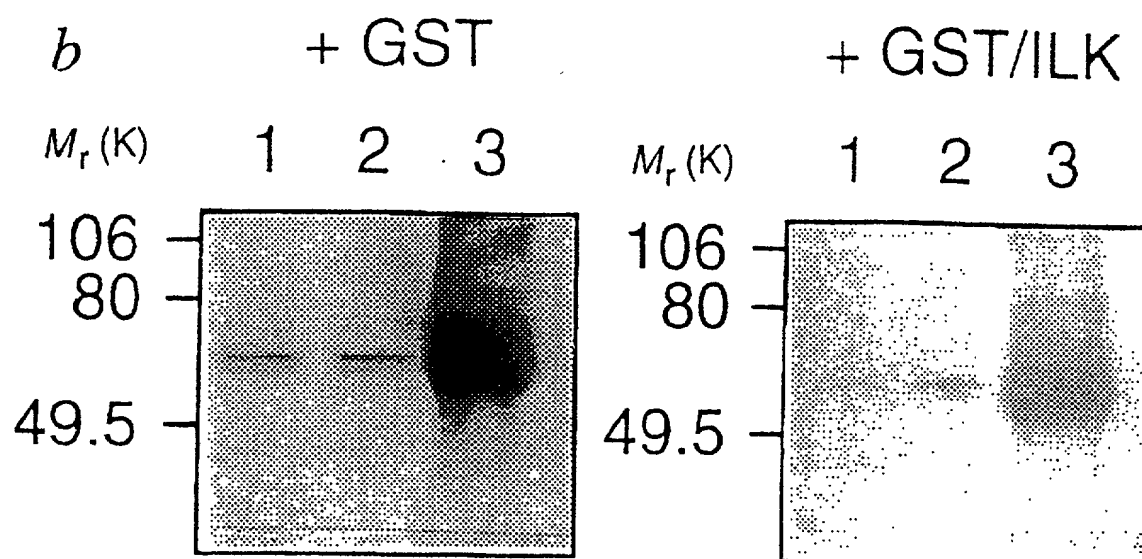


Fig. 3b

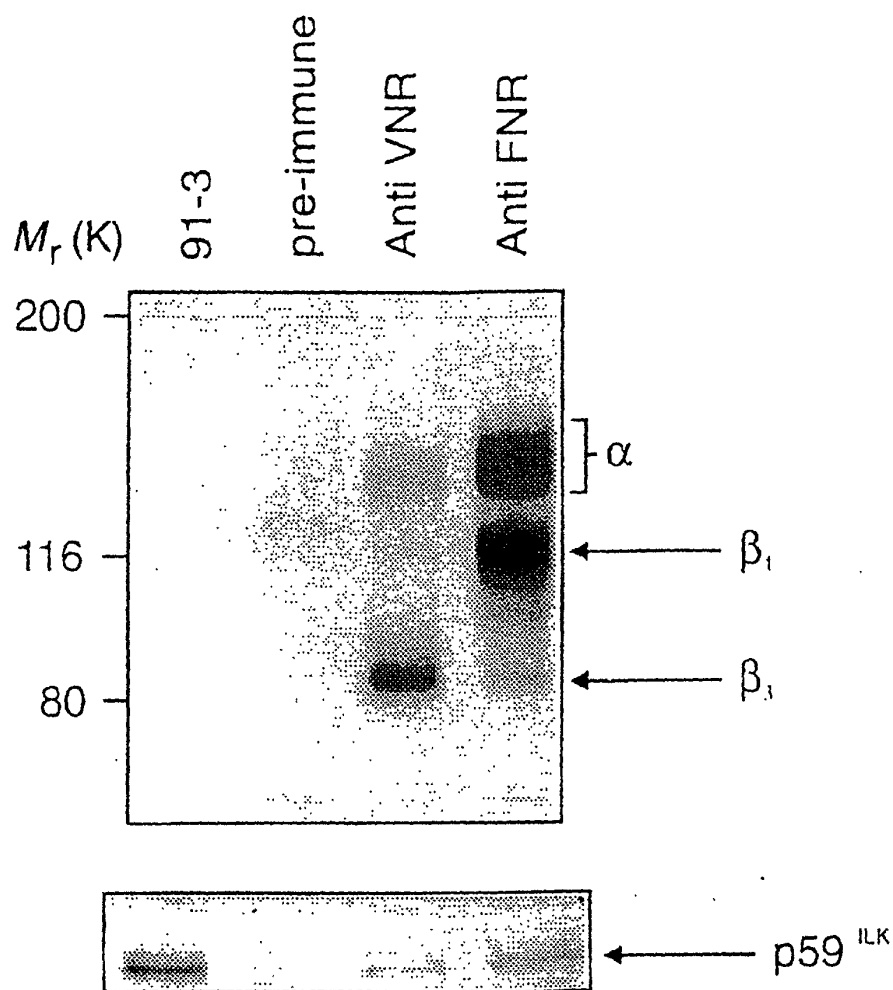


Fig. 3c

Immunoprecipitation: anti  $\beta 1$  monoclonal antibodies

Immunoblot: anti-ILK      adsorbed anti-ILK

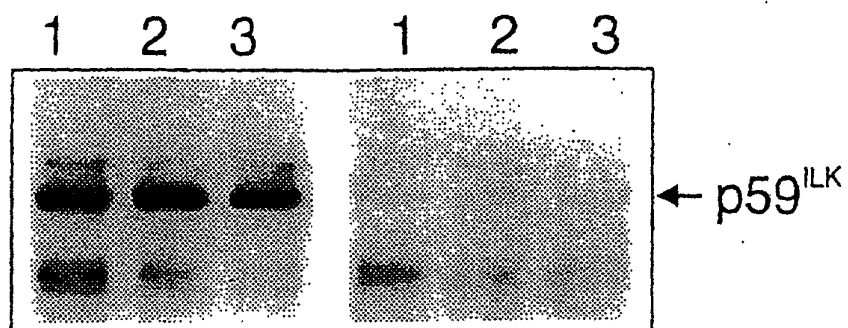


Fig. 3d

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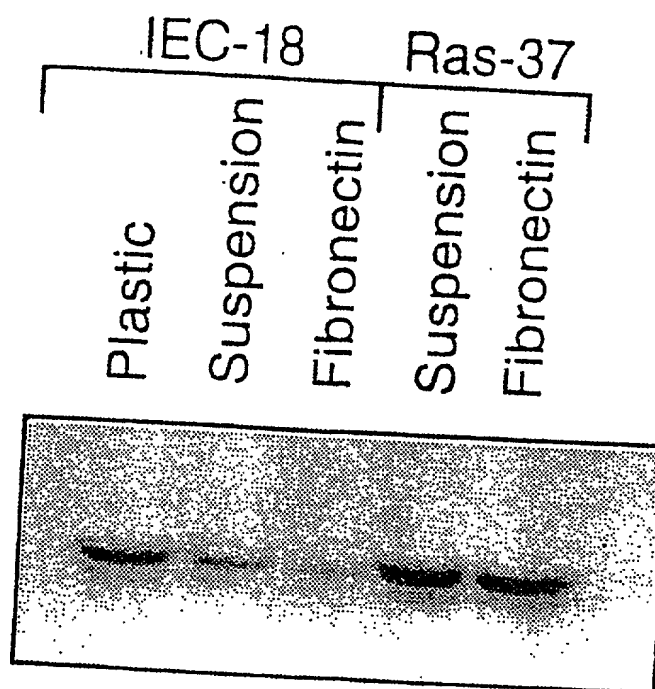


Fig. 4a

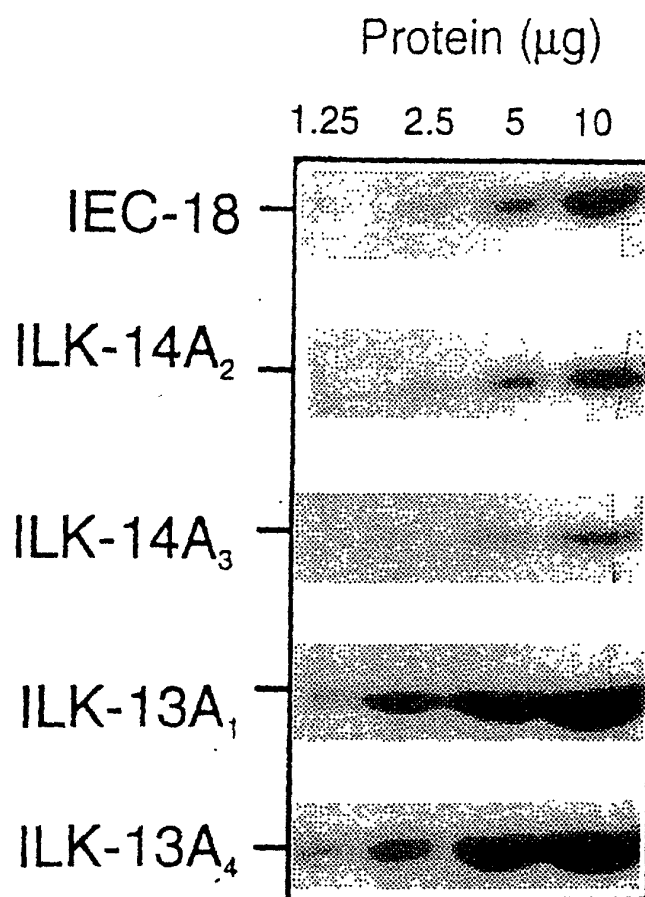


Fig. 4b

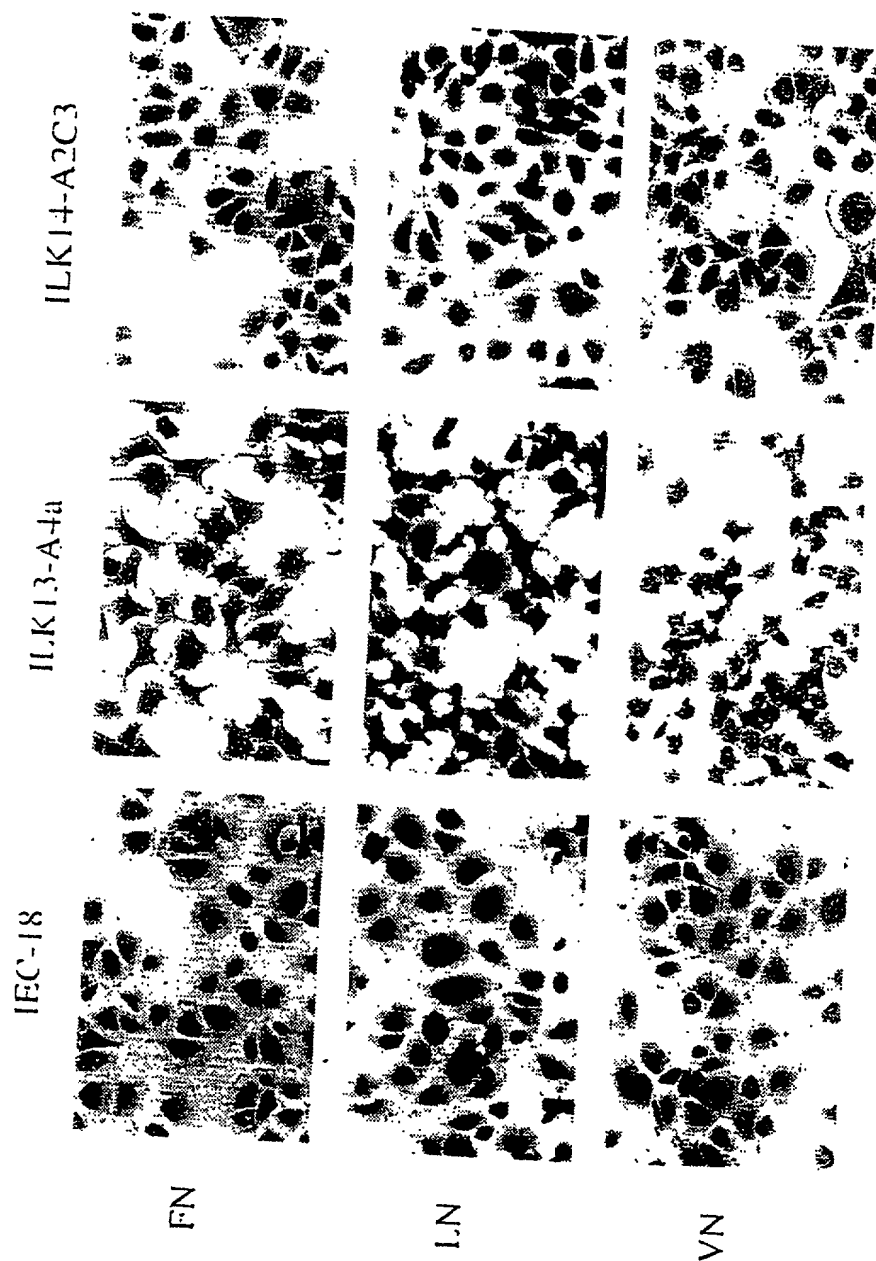


Fig. 4c

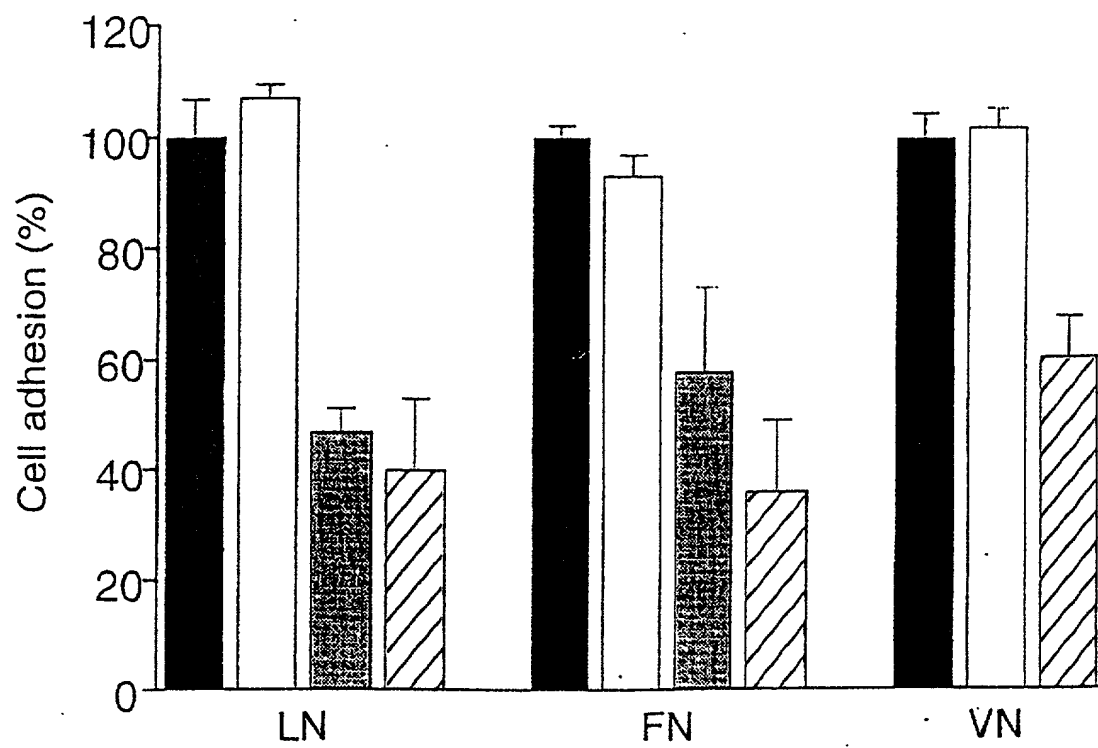


Fig. 4d

Experiment 1

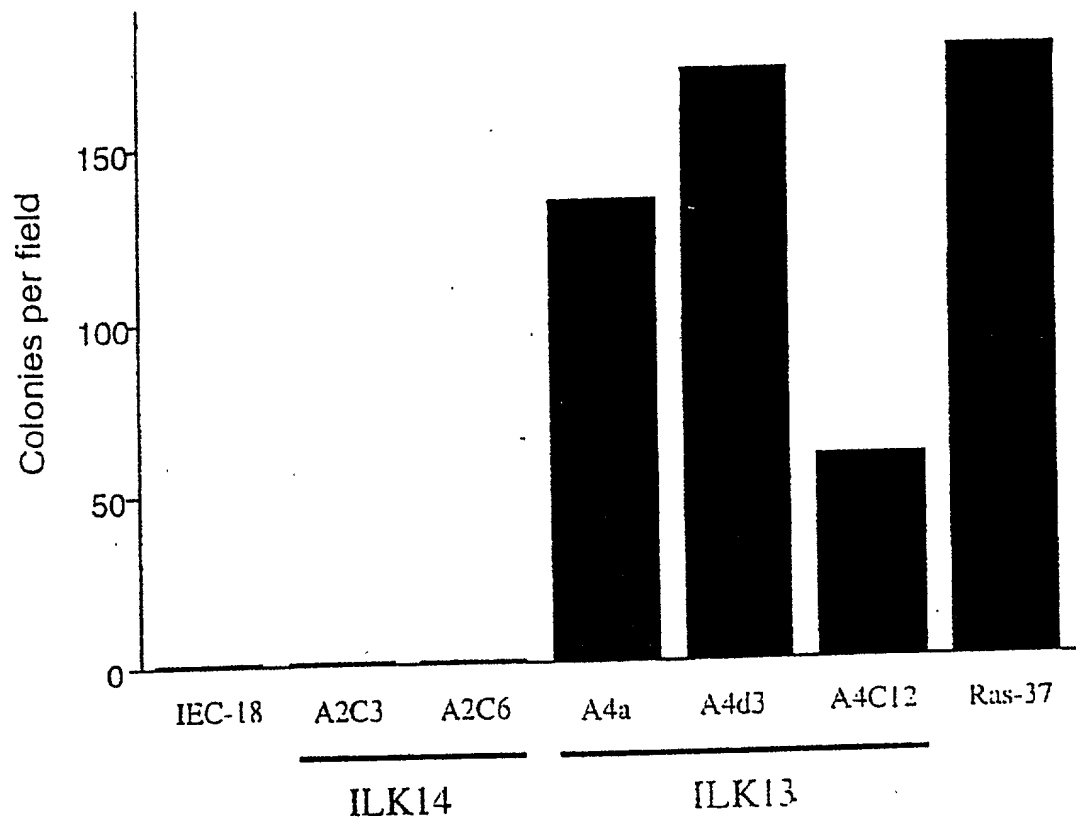


Fig. 4e (continued on page 21/23)

Experiment 2

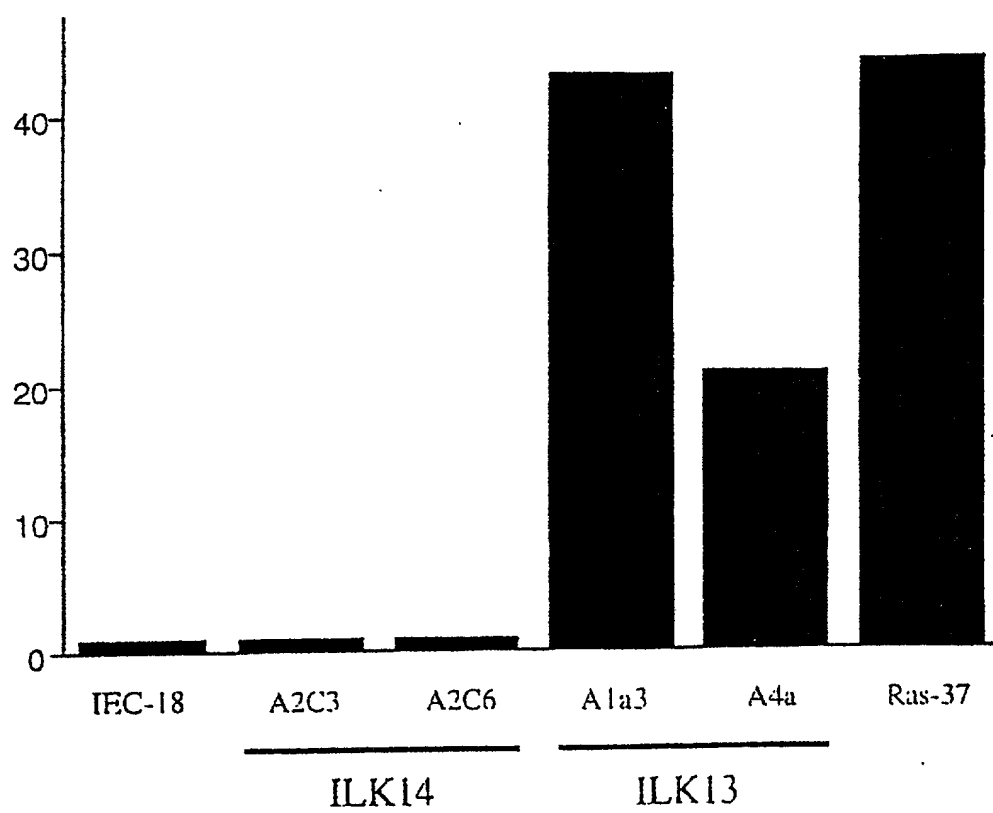


Fig. 4e

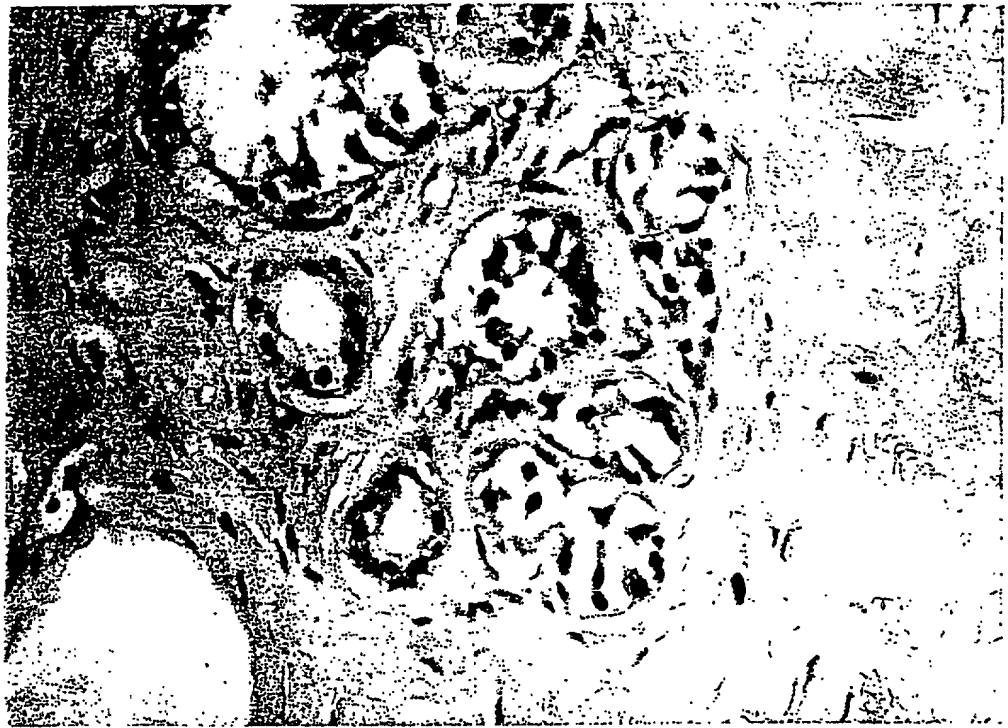


Fig. 5a



Fig. 5b



Fig. 5c

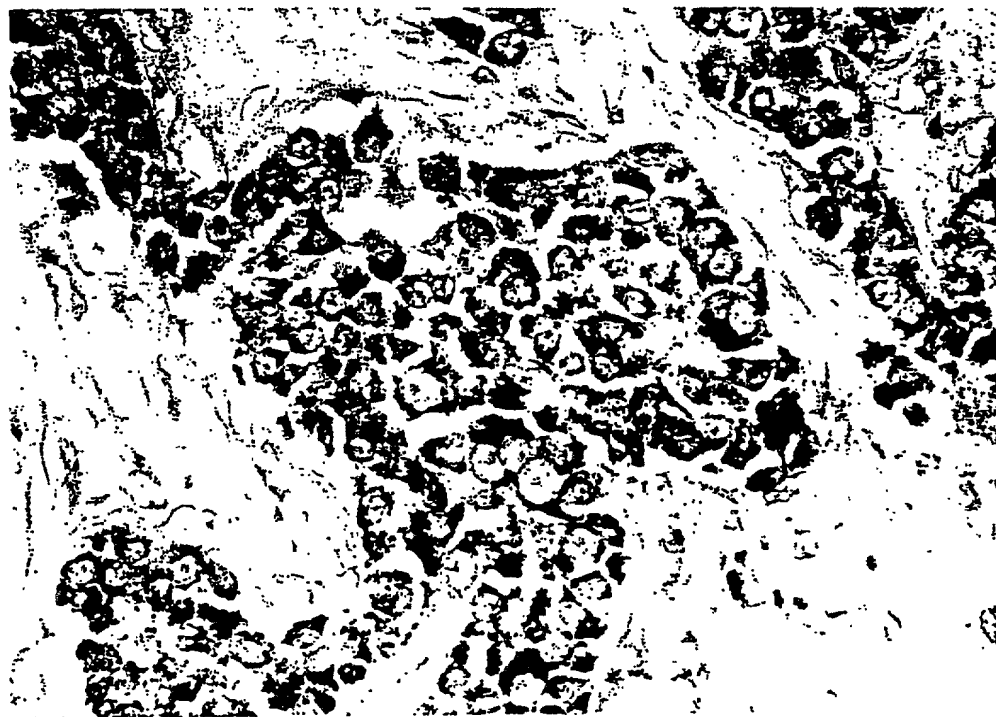


Fig. 5d